

13-C

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER STANDARDS AND FACILITY REGULATION NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

WATERSHED

NAME Antrim Township

ADDRESS 10655 Antrim Church Road

Greencastle, PA 17225-0130

FACILITY Antrim Township STP

LOCATION Antrim Township

Franklin County

PA0080519 001
PERMIT NUMBER OUTFALL NUMBER

DMR Effective From:

DMR Effective To:

Permit Expires:

Permit Application Due:

Check Here if No Discharge

September 1, 2011

August 31, 2016

March 4, 2016

Reporting Frequency:

YEAR MO DAY TO YEAR MO DAY

NOTE: Read Instructions before completing this form

Monthly

PARAMETER		QUAN	TITY OR LOADIN	IG	QI	JALITY OR CON	CENTRATION		NO.	FREQUENC	Y S	SAMPLE
PARAMETER		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS	EX	OF ANALYS	S	TYPE
	SAMPLE MEASUREMENT				****	****	****					
Flow	PERMIT REQUIREMENT	Report Avg Mo	Report Daily Max	MGD	****	****	****	****		Continuous	N	leasured
	SAMPLE MEASUREMENT	****	****			****						
pН	PERMIT REQUIREMENT	****	****	****	6.0 Min	****	9.0 IMAX	mg/L		1/day		Grab
	SAMPLE MEASUREMENT	****	****			****	****					
Dissolved Oxygen	PERMIT REQUIREMENT	****	****	****	5.0 Min	****	****	mg/L		1/day		Grab
	SAMPLE MEASUREMENT				****							
CBOD5	PERMIT REQUIREMENT	250 Avg Mo	400 Wkly Avg	lbs/day	****	25 Avg Mo	40 Wkly Avg	mg/L		2/week	С	24-Hr omposite
	SAMPLE MEASUREMENT				****		****					
BOD5 Raw Sewage Influent	PERMIT REQUIREMENT	Report Avg Mo	Report Daily Max	lbs/day	****	Report Avg Mo	****	mg/L		2/week	С	24-Hr omposite
	SAMPLE MEASUREMENT				****		****					
Total Suspended Solids Raw Sewage Influent	PERMIT REQUIREMENT	Report Avg Mo	Report Daily Max	lbs/day	****	Report Avg Mo	****	mg/L		2/week	С	24-Hr omposite
	SAMPLE MEASUREMENT				****							·
Total Suspended Solids	PERMIT REQUIREMENT	300 Avg Mo	450 Wkly Avg	lbs/day	****	30 Avg Mo	45 Wkly Avg	mg/L		2/week	С	24-Hr omposite
NAME/TITLE PRINCIPAL EX	ECUTIVE OFFICER	direction or supervision in that qualified personnel g	aw that this document was accordance with a system ather and evaluate the info	designed to assure rmation submitted.			TELEPHONE		Ε	DAT	E _T	
		or those persons directly information submitted is,	ne person or persons who ne responsible for gathering the to the best of my knowledged am aware that there are s	he information, the ge and belief, true,								
TYPED OR PR	INTED	for submitting false infor	mation, including the poss g violations. See 18 Pa. C.	sibility of fine and		OF PRINCIPAL OR AUTHORIZE		AREA CODE	NUME	BER YEA	R MC	DAY

COMMENTS (Report all violations on the "Non-Compliance Reporting Form")

PAGE 1 OF 2



PERMITTEE NAME/ADDRESS

NAME	Antrim Township										
ADDRESS	10655 Antrim Church Road	P	A00805	19			001		Reporting Frequency:	Monthly	
	Greencastle, PA 17225-0130	PER	IUN TIN	MBER		OUTF	ALL NU	MBER	DMR Effective From:	September 1, 2011	
FACILITY	Antrim Township STP								DMR Effective To:	August 31, 2016	
LOCATION	Antrim Township			MONITO	RING P	ERIOD			Permit Expires:	August 31, 2016	
	Franklin County	YEAR	МО	DAY		YEAR	МО	DAY	Permit Application Due:	March 4, 2016	
WATERSHED	13-C				то				Check Here if No Disc	harge	

PARAMETER QUANTITY OR LOADING QUALITY OR CONCENTRATION NO. FREQUENCY SAMP

PARAMETER		QUANTITY OR LOADING			Q		NO.	FREQUENCY	SAI	MPLE		
PARAMETER		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS	EX	OF ANALYSIS	T'	YPE
	SAMPLE MEASUREMENT	****	****		****							
Fecal Coliform May 1 - Sep 30	PERMIT REQUIREMENT	****	****	****	****	200 Geo Mean	1,000 IMAX	CFU/ 100 ml		2/week	G	Grab
	SAMPLE MEASUREMENT	****	****		****							
Fecal Coliform Oct 1 - Apr 30	PERMIT REQUIREMENT	****	****	****	****	2,000 Geo Mean	10,000 IMAX	CFU/ 100 ml		2/week	G	Grab
•	SAMPLE MEASUREMENT		****		****		****					
Total Phosphorus	PERMIT REQUIREMENT	20 Avg Mo	****	lbs/day	****	2.0 Avg Mo	****	mg/L		2/week		4-Hr nposite
•	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT]								
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL	EXECUTIVE OFFICER	direction or supervision in that qualified personnel g	aw that this document was accordance with a system ather and evaluate the info	designed to assure ormation submitted.				TELEPHON		≣	DATE	
		Based on my inquiry of th or those persons directly information submitted is,	e person or persons who n responsible for gathering to to the best of my knowledo am aware that there are s	nanage the system he information, the ge and belief, true,								
		for submitting false infor	am aware that there are s mation, including the post violations. See 18 Pa. C.	sibility of fine and	SIGNATUR	E OF PRINCIPAL	EXECUTIVE					
TYPED OR F	PRINTED				OFFICER	R OR AUTHORIZE	D AGENT	AREA CODE	NUME	BER YEAR	МО	DAY

COMMENTS (Report all violations on the "Non-Compliance Reporting Form")



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WATERSHED	13-C					ТО				Check Here if No Disc	charge
										NOTE: Read Instructions b	efore completing this form

DADAMETED		QUAN'	TITY OR LOADIN	IG	QI	JALITY OR CON	ICENTRATION		NO.	FREQUENCY	SAI	MPLE
PARAMETER		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS	EX	OF ANALYSIS	T	YPE
	SAMPLE MEASUREMENT		****		****		****					
AmmoniaN	PERMIT REQUIREMENT	Report Total Mo	****	lbs	****	Report Avg Mo	****			1/week	_	4-Hr nposite
	SAMPLE MEASUREMENT		****		****		****					-
KjeldahlN	PERMIT REQUIREMENT	Report Total Mo	****	lbs	****	Report Avg Mo	****			1/week	_	4-Hr nposite
	SAMPLE MEASUREMENT		****		****	_	****					
Nitrate-Nitrite as N	PERMIT REQUIREMENT	Report Total Mo	****	lbs	****	Report Avg Mo	****			1/week		4-Hr nposite
	SAMPLE MEASUREMENT		****		****		****					
Total Nitrogen	PERMIT REQUIREMENT	Report Total Mo	****	lbs	****	Report Avg Mo	****			1/month	Calc	culation
	SAMPLE MEASUREMENT		****		****	****	****					
Total Phosphorus	PERMIT REQUIREMENT	Report Total Mo	****	lbs	****	****	****	****		1/month	Calc	culation
	SAMPLE MEASUREMENT		****		****	****	****					
Net Total Nitrogen	PERMIT REQUIREMENT	Report Total Mo	****	lbs	****	****	****	****		1/month	Calc	culation
	SAMPLE MEASUREMENT		****		****	****	****					
Net Total Phosphorus	PERMIT REQUIREMENT	Report Total Mo	****	lbs	****	****	****	****		1/month	Calc	culation
NAME/TITLE PRINCIPAL EX	XECUTIVE OFFICER	direction or supervision in	aw that this document was accordance with a system ather and evaluate the info	designed to assure					TELEPHONE		DATE	
		Based on my inquiry of th or those persons directly	ne person or persons who ne responsible for gathering to the best of my knowledge	nanage the system he information, the								
TYPED OR PF	RINTED	accurate and complete. I for submitting false infor	am aware that there are s mation, including the poss violations. See 18 Pa. C.	ignificant penalties sibility of fine and		OF PRINCIPAL OR AUTHORIZE		AREA CODE	NUMI	BER YEAR	MO	DAY

COMMENTS (Report all violations on the "Non-Compliance Reporting Form")

PAGE 1 OF 1



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 Antrim Township

 ADDRESS
 10655 Antrim Church Road

 Greencastle, PA 17225-0130

FACILITY Antrim Township STP

LOCATION Antrim Township

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WATERSHED 13-C

PA0080519							
PERMIT NUMBER							

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MONITORING PERIOD											
YEAR	YEAR MO DAY YEAR MO DAY										
			ТО								

INTERIM

Reporting Frequency:

DMR Effective From:

DMR Effective To:

September 1, 2011

September 30, 2011

Permit Expires:

August 31, 2016

Permit Application Due:

March 4, 2016

Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUAN	TITY OR LOADIN	IG	Ql	JALITY OR CON	ICENTRATION	NO.		FREQUENCY	SAI	MPLE
FARAMETER		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS	EX	OF ANALYSIS	T`	YPE
	SAMPLE MEASUREMENT	****			****	****	****					
AmmoniaN	PERMIT REQUIREMENT	****	Report Total Annual	lbs	****	****	****	****		1/year	Calc	culation
	SAMPLE MEASUREMENT	****			****	****	****					
Total Nitrogen	PERMIT REQUIREMENT	****	Report Total Annual	lbs	****	****	****	****		1/year	Calc	culation
-	SAMPLE MEASUREMENT	****			****	****	****					
Total Phosphorus	PERMIT REQUIREMENT	****	Report Total Annual	lbs	****	****	****	****		1/year	Calc	culation
	SAMPLE MEASUREMENT	****			****	****	****					
Net Total Nitrogen	PERMIT REQUIREMENT	****	Report Total Annual	lbs	****	****	****	****		1/year	Calc	culation
-	SAMPLE MEASUREMENT	****			****	****	****					
Net Total Phosphorus	PERMIT REQUIREMENT	****	Report Total Annual	lbs	****	****	****	****		1/year	Calc	culation
•	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL E	XECUTIVE OFFICER	direction or supervision in that qualified personnel g	aw that this document was paccordance with a system of ather and evaluate the info	designed to assure rmation submitted.				TEL	EPHONI	Ε	DATE	
Based on my inquiry of the person or persons who m or those persons directly responsible for gathering th information submitted is, to the best of my knowledge accurate and complete. I am aware that there are significant	ne information, the le and belief, true.											
		for submitting false info	rmation, including the poss y violations. See 18 Pa. C.9	ibility of fine and	SIGNATURE OF PRINCIPAL EXECU		EXECUTIVE					
TYPED OR P	RINTED	,				OR AUTHORIZE		AREA CODE	NUMI	BER YEAR	MO	DAY

COMMENTS (Report all violations on the "Non-Compliance Reporting Form")



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 NAME
 Antrim Township

 ADDRESS
 10655 Antrim Church Road

 Greencastle, PA 17225-0130

 FACILITY
 Antrim Township STP

 LOCATION
 Antrim Township

Franklin County

WATERSHED 13-C

PA0080519 PERMIT NUMBER 001 OUTFALL NUMBER

		12/11/ 11/0 2/11				
YEAR	МО	DAY		YEAR	МО	DAY
			ТО			

FINAL

Reporting Frequency:

DMR Effective From:

October 1, 2011

DMR Effective To:

August 31, 2016

Permit Expires:

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		QUAN	ITITY OR LOADIN	IG	Ql	JALITY OR CON	ICENTRATION		NO.	FREQUENCY	SAMPLE	
PARAMETER		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS	EX	OF ANALYSIS		YPE
	SAMPLE MEASUREMENT	****			****	****	****					
AmmoniaN	PERMIT REQUIREMENT	****	Report Total Annual	lbs	****	****	****	****		1/year	Calc	ulation
	SAMPLE MEASUREMENT	****			****	****	****					
Total Nitrogen	PERMIT REQUIREMENT	****	Report Total Annual	lbs	****	****	****	****		1/year	Calc	ulation
	SAMPLE MEASUREMENT	****			****	****	****					
Total Phosphorus	PERMIT REQUIREMENT	****	Report Total Annual	lbs	****	****	****	****		1/year	Calc	ulation
	SAMPLE MEASUREMENT	****			****	****	****					
Net Total Nitrogen	PERMIT REQUIREMENT	****	21,918 Total Annual	lbs	****	****	****	****		1/year	Calc	ulation
	SAMPLE MEASUREMENT	****			****	****	****					
Net Total Phosphorus	PERMIT REQUIREMENT	****	2,922 Total Annual	lbs	****	****	****	****		1/year	Calc	ulation
•	SAMPLE MEASUREMENT									,		
	PERMIT REQUIREMENT			1								
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL E	XECUTIVE OFFICER	direction or supervision i that qualified personnel	law that this document was p n accordance with a system of gather and evaluate the info	designed to assure rmation submitted.				TELE	PHON		DATE	
		or those persons directly information submitted is	the person or persons who my responsible for gathering the to the best of my knowledged am aware that there are significant.	he information, the ge and belief, true,								
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TYPED OR PI	RINTED				OFFICER	OR AUTHORIZE	D AGENT	AREA CODE	NUM	BER YEAR	МО	DAY

COMMENTS (Report all violations on the "Non-Compliance Reporting Form")



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER STANDARDS AND FACILITY REGULATIONS

INSTRUCTIONS FOR COMPLETING DISCHARGE MONITORING REPORTS (DMRs)

General

One or more Discharge Monitoring Reports (DMRs) are attached to your permit for reporting the results of self-monitoring activities as required by your permit. You should make copies of the DMRs for your ongoing use, unless you elect to participate in the Department of Environmental Protection's (DEP's) electronic DMR (eDMR) program (see www.dep.state.pa.us/edmr).

- Reporting frequencies will vary depending on the monitoring frequencies listed in your permit, and are generally monthly, quarterly semi-annually and annually.
- Your reports must be <u>received</u> by the Department on the 28th day of the month following the end of the reporting period.
- Your permit may require submission of DMRs to other agencies, including the U.S. Environmental Protection Agency (EPA).
- If you receive DMRs in the mail from EPA, please discontinue use of DMR Form No. 3800-FM-WSFR0462 and begin using EPA's DMRs.
- DMRs will generally include pre-populated information for permittee name and address, facility location, permit number, outfall number, permit expiration date, parameter names, and permit requirements. If you identify any errors on a DMR issued by DEP, please contact the DEP regional office that issued your permit. If you identify any errors on a DMR issued by EPA, please contact DEP's Central Office at 717-787-6744.
 DO NOT make changes to DMRs issued to you.
- You may use computer-generated replicas of Form No. 3800-FM-WSFR0462 or of EPA's DMR if you receive
 prior approval from DEP and EPA. DEP reserves the right to instruct you to discontinue the
 submission of computer-generated DMRs if the permit requirements you entered on the form are
 inaccurate.

Instructions

- 1. Enter statistical results into each blank field below the "VALUE" column headers. Results must be reported in the same units shown on the DMR.
- 2. Sum the total number of excursions or exceedances of permit limits across the row for each parameter and enter the value into the "NO. EX" field. For example, if the permit contains limits of 6.0 S.U. (Minimum) and 9.0 S.U. (Maximum) for pH, and the Minimum and Maximum results are 5.9 S.U. and 9.1 S.U., respectively, enter "2" into the "NO. EX" field.
- 3. Report the actual sampling frequency and sample type utilized during the reporting period in the fields corresponding to "Frequency of Analysis" and "Sample Type", respectively.
- 4. Type the name of the principal executive officer (or an authorized agent designated by a principal executive officer) who is taking responsibility for the report, sign the report (should be in ink), enter the telephone number of the responsible individual, and record the date that the report was signed. Mail only original, signed copies of DMRs.
- 5. In the Comments section at the bottom of the DMR, you may write a brief summary of violations in this section; however, DEP requests that <u>all</u> violations during the monitoring period be reported in more detail on DEP's **Non-Compliance Reporting Form** (3800-FM-WSFR0440) and be submitted as an attachment to the DMR. Other uses of the Comments Section include explanations of attachments to the DMR, explanations for the unavailability of data, and brief summaries of issues that have affected operations or effluent quality during the monitoring period. Always consider attaching a letter or separate document to explain your situation in more detail.

No Discharge or No Data Available

If there was <u>no discharge at all from an outfall</u> during the monitoring period, check the "No Discharge" box on the top of the DMR. Complete the information above and below the table and mail the DMR to the appropriate agencies. Be sure to sign and date the DMR.

If there was no discharge of a specific parameter (e.g., if a chlorine limit is in the permit but chlorine was not used for disinfection during the entire reporting period), or if data are not available for a specific parameter for the entire reporting period, do not leave the DMR blank. Instead, report one of the following No Data Indicator (NODI) codes that apply to your situation in the appropriate value field, and **provide an explanation as an attachment to the DMR**:

- A Use if you are exempted from monitoring the parameter because of a General Permit condition.
- **E** Use if <u>all samples or results</u> are not available for the reporting period due to equipment failure or because sample collection was overlooked or samples could not be collected for the parameter.
- **GG** Use if your permit requires sample collection and analysis only under certain conditions and those conditions were not met during the reporting period (e.g., report chlorine results only when chlorination system is used).
- FF Other: use if there is any reason for the absence of data that is not covered by those above.

If you have at least one result for a parameter, the value should be reported and not a NODI code.

Calculations

The following explains how to calculate statistical values that are commonly required by permits:

Monthly Average – For Loading (lbs/day), sum the total of daily loadings and divide by the number of samples during the month. To calculate the daily loading, multiply the daily concentration (mg/l) by the flow (MGD) on the date of sampling and a conversion factor of 8.34. For Concentration, sum the total of daily concentrations and divide by the number of samples.

Weekly Average – For Loading (lbs/day), sum the total of average daily loadings during each week of the reporting period (beginning on a Sunday and ending on a Saturday) and divide by the number of samples during the week. For Concentration, sum the total of daily concentrations each week and divide by the number of samples. Report the <u>maximum</u> weekly average on the DMR.

Maximum Daily ("Daily Max") – Report the maximum concentration or load measured during a 24-hour period during the reporting period; if multiple measurements are taken daily, include all data in the analysis.

Instantaneous Maximum ("IMAX") – Report the maximum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Instantaneous Minimum ("Minimum") – Report the minimum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Total Monthly Load (lbs) – Sum the total of average daily loadings, divide by the number of samples during the month, and multiply by the number of days in the month.

Geometric Mean – Report the average of a set of n sample results given by the nth root of their product. If any result is zero (0), substitute 1 for the calculation. For example, five samples were analyzed with the following results: 20, 300, 400, 500, and 0. The calculation of geometric mean is as follows (note that you will need to use the power function on a calculator):

$$\sqrt[5]{20 \cdot 300 \cdot 400 \cdot 500 \cdot 1} = \sqrt[5]{1,200,000,000} = (1,200,000,000)^{1/5} = 65$$

Non-Detect Data

Conventional and Toxic Parameters

For calculating average values of data sets in which there are some "detections" (results at or above the laboratory reporting limit) and some "non-detect" data (results reported below the laboratory reporting limit), use a value of one-half (0.5)* the reporting limit for non-detect data. For example, four samples were analyzed with the following results: < 1.0, 2.0, < 1.0, and 1.0. Calculate the average value by assigning 0.5 to the non-detect values of < 1.0, resulting in an average of 1.0.

To report average and maximum values where all results are non-detect for the reporting period, use the highest reporting limit and include the less than (<) symbol. For example, if four sample results are < 1.0, < 2.0, < 1.0, and < 1.0, report the average and maximum results as < 2.

* Where the permit includes an effluent limitation for a parameter that is less than the most sensitive detection limit available, and the laboratory reports a value at or below the lowest level specified by the permit, you may use zero (0) in the calculation in lieu of one-half, if the parameter is identified in 25 Pa. Code Chapter 16, Appendix A, Tables 2A and 2B. In general, parameters with limitations that are less than the most sensitive detection limit will be identified in Part C of the permit, if applicable.

Bacteria Parameters

Report all "non-detect" (e.g., < 2) and "too numerous to count" (TNTC) (e.g., >2,000) results on DMR supplemental forms as reported by the laboratory. Do not report "TNTC" on supplemental forms, but instead report a value qualified with the">" symbol. Where a data set includes one or more "non-detect" and/or TNTC results, calculate the geometric mean by ignoring qualifying symbols, but report the value with the symbol. If a data set includes both">" and"<" qualifiers, the ">" qualifier takes precedence for reporting. For all "non-detect" values, specify in the Comments section of the DMR the maximum volume filtered at the laboratory.

Example 1 – Four results are determined, < 2, 10, 20, and 30. The geometric mean should be reported as < $(2 \cdot 10 \cdot 20 \cdot 30)^{0.25} = < 10$. Specify the maximum volume filtered for the < 2 result in the DMR Comments.

Example 2 – Three results are determined, < 2, 1,000, and > 2,000. The geometric mean should be reported as > $(2 \cdot 1,000 \cdot 2,000)^{0.33} = > 159$.

Rounding and Precision

Results should be reported at the same level of precision as the effluent limitation. For example, if a limit is 1.1 and the average value of your results is 1.05, report the value as 1.1. If there is no effluent limitation ("Monitor and Report" only), report the value to the same level of precision as reported by the laboratory or as recommended by the equipment manufacturer.

For more information please see the documents "Discharge Monitoring Reports Overview and Summary" (3800-BK-DEP3047) and "Management of Non-Detect Results for Discharge Monitoring Reports" (3800-FS-DEP4262), available on DEP's Web site.